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Notice of Allowability	Application No.	Applicant(s)	
	09/510,300	PARK ET AL.	
	Examiner	Art Unit	
	Thoi V. Duong	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 09/15/2006.
2. ☒ The allowed claim(s) ~~is~~ are 1-5, 10-18, 20 and 21.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. <input type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ 7. <input type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____ |
|---|--|

DUNG T. NGUYEN
PRIMARY EXAMINER

DETAILED ACTION

1. This office action is in response to the Amendment filed September 15, 2006.

Accordingly, claims 6-9 and 19 were cancelled and claims 1-5, 10-18, 20 and 21 are currently pending in this application.

Allowable Subject Matter

2. Claims 1-5, 10-18, 20 and 21 are allowed.

The following is an examiner's statement of reasons for allowance: none of the prior art of record fairly suggests or shows all of the limitations as claimed. Specifically,

Re claim 1, none of the prior art of record discloses, in combination with other limitations as claimed, a liquid crystal display having a plurality of pixels, each pixel comprising a pixel electrode being connected to the drain electrode through the contact hole and partially overlapping the data line on a first transparent substrate; and a black matrix, a color filter and a common electrode on a second transparent substrate, the black matrix being extended along the data line to overlap partially and asymmetrically with the data line.

The most relevant reference, US 5,877,830 to Shimada et al. (Shimada), fails to suggest each pixel having a black matrix being extended along the data line to overlap partially and asymmetrically with the data line. As shown in Figs. 1-4, Shimada discloses a liquid crystal display comprising a pixel electrode 11 being connected to the drain electrode 6b through the contact hole 10 and partially overlapping the data line 8 on a first transparent substrate 1a; and a black matrix 13, a color filter 14 and a common electrode 15 on a second transparent substrate 12a, the black matrix 13 being

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extended along the data line 10 to overlap partially with the data line 8 as shown in Fig.

1. However, Shimada only discloses that the black matrix 13 partially overlaps a portion of the outermost data line 8(19); Shimada does not suggest the black matrix being extended along the data line to overlap partially with the data line for each pixel in the display area 30 (col. 6, lines 8-22).

Re claims 10, 15 and 20, none of the prior art of record discloses, in combination with other limitations as claimed, a cut-off film formed under the data line, wherein an edge portion of the cut-off film is overlapped by an edge portion of the data line and the pixel electrode partially overlaps the data line, and an overlap length between the edge portion of the cut-off film and the edge portion of the data line is substantially the same as an overlap length between the pixel electrode and the data line.

The most relevant reference, USPN 5,953,088 to Hanazawa et al. (Hanazawa), fails to disclose or suggest an overlap length between the edge portion of the cut-off film and the edge portion of the data line is substantially the same as an overlap length between the pixel electrode and the data line. As shown in Figs. 11 and 15, Hanazawa discloses a cut-off film 53a(SH) formed under the data line 50a(X), wherein an edge portion of the cut-off film is overlapped by an edge portion of the data line and the pixel electrode 51(PE) partially overlaps the data line 50a(X); however, an overlap length between the edge portion of the cut-off film 53a(SH) and the edge portion of the data line 50a(X) is not the same as an overlap length between the pixel electrode 51(PE) and the data line 50a(X).

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

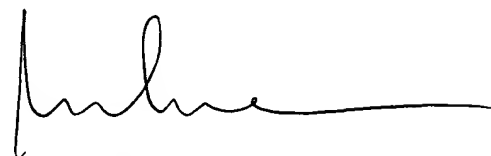
3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thoi V. Duong whose telephone number is (571) 272-2292. The examiner can normally be reached on Monday-Friday from 8:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms, can be reached at (571) 272-1787.

Thoi Duong



11/14/2006



DUNG T. NGUYEN
PRIMARY EXAMINER